

### STATE OF NORTH DAKOTA

## OFFICE OF STATE TAX COMMISSIONER

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# INTEGRATED TAX SYSTEM PROJECT BUSINESS CASE

## **EXECUTIVE SUMMARY**

The attached represents an analysis and justification for the implementation of an integrated tax system by the Office of the State Tax Commissioner. The format of the document follows the guidelines developed by the State's Information Technology Department.

## The Issue

The Office of State Tax Commissioner is the primary revenue collecting agency for the State of North Dakota, administering 35 different tax types and collecting nearly \$2 billion a biennium. This is currently being done using a conglomeration of software systems. The most critical of these are built on 40-year old technology that is increasingly difficult and expensive to use and maintain. A rapidly dwindling pool of people with the skills to maintain these old technologies compounds the problem.

With such an old system, the Tax Department has reached a point of diminishing returns in its ability to gain further savings from technology. More importantly, there is a significant risk of a major failure in the Department's business processes, which could also lead to potential losses of revenue. As an example, New Mexico had to cease sending individual income tax assessments for an extended period because their old system could no longer handle the processing.

#### The Solution

The Tax Department has evaluated the three available options for dealing with this issue. These include:

- ▶ Migrating the existing systems from the mainframe to a more modern hardware platform.
- ▶ Designing and programming a new system from scratch.
- ▶ Implementing a commercial off-the-shelf (COTS) integrated tax system.

Migrating the old system off of the mainframe does not change its underlying technology, nor does it create any improvements in its capability or useful life. The need to replace the existing systems will still remain. The migration effort will only be a costly and time-consuming detour from the necessary replacement.

Developing a new system that is totally customized for North Dakota is extremely risky. This "start-from-scratch" approach is very expensive, takes a long time to complete, and often does not yield the desired results. There have been a number of these projects in other revenue agencies that have failed.



The Tax Department will acquire and implement a COTS integrated tax system. With a COTS package, the basic architecture and programming are already complete. The project will be able to deploy the system rapidly and get something in front of the users quickly. Both during and after implementation, changes can be made on the fly, since the business rules are maintained in reference tables, not embedded in "hard" code.

Overall, implementing a COTS package will:

- ► Reduce risk
- ► Reduce cost
- ► Shorten the implementation schedule
- ► Take advantage of upgrades that are made to the core product
- ► Enable North Dakota to quickly adapt to tomorrow's business challenges

In order to maximize the above benefits, the Tax Department will take the approach of molding its business processes to the manner in which the COTS system is designed, rather than trying to customize the system. This will ensure that upgrades to the product can be more easily incorporated, and that overall maintenance costs will be minimized.

An Integrated Tax System is the key to preventing the interruption of critical government services and was ranked by SITAC as the number 4 priority in IT projects for the State. The Integrated Tax System positions the State to continue to reduce the cost of collecting revenue, increase compliance, and improve overall performance.

## The Benefits and Costs

An up-to-date integrated tax system will provide a myriad of benefits for the State of North Dakota. Some of the specific benefits of the new system will include:

- ► Reduced operating and maintenance costs
- ► Improved customer service
- ► Faster access to taxpayer information
- ► Speedier refunds
- ► Increased voluntary compliance
- ► More reliable data, with better analytical capabilities
- ▶ Better modeling and faster implementation of tax law changes
- ► Elimination of business silos
- ► Improved productivity and workflow management
- ► Automated tools that enhance collections management, audit selection and timeliness, and discovery of non-filers

An initial analysis has also been made to identify those areas within the Tax Department where the added capabilities of the new system could potentially yield additional revenues. The most likely areas are related to increased discovery of non-resident taxpayers through enhanced records matching, better tools for prioritizing collections and audit activities, and a general increase in the number of audits due to better access to data and more effective workflow management tools. The total potential increase is estimated at \$2.5 million annually. It should be noted that there are many variables that affect revenue for the State, and isolating those to specific improvements generated by a new tax system is difficult.



The key components of cost for the project include: software, particularly the license for the COTS product; hardware, particularly the servers to run the application and related databases; services, including implementation support from the COTS vendor, professional project management, and programming, data conversion and hosting services from ITD; project operating expenses such as space and equipment; and contingency to cover differences in bid prices to current estimates and other changes in circumstance. The overall budget for the project is approximately \$13,700,000.

In addition to the potential for increased revenues, there will also be an estimated savings in operating costs of \$220,000 per year. The net result is a project payback of approximately five years.

There are a variety of options for funding the project that will allow the costs to be paid as the benefits are realized. The Tax Department has reviewed certain bonding and direct loan possibilities with the Industrial Commission and the Bank of North Dakota. However, the intent is to have the Legislature select a funding mechanism that meets its objectives for optimizing use of general fund dollars.

This project has a high level of importance for ensuring effective tax administration in North Dakota. In order to identify the best solution, maximize results, and minimize risks, the Tax Department has retained a consulting firm that has successfully managed similar projects for revenue agencies in three other states.

The Integrated Tax System Project has been analyzed in more detail in the following pages using ITD's standard business case template for information technology initiatives.



## **PROJECT BUSINESS CASE**

**Project Name:** Integrated Tax System

**Project Short Name: ND-ITS** 

**Agency:** Office of the State Tax Commissioner

Business Unit/Program Area: All

Type of Project: New Initiative

**Date:** January 17, 2005

Version: 2

## **Project Description**

ND-ITS is a multi-phased, 2-year project that will convert most of the Tax Department's myriad of well-worn computerized tax processing systems to a modern integrated tax system, one more capable of quickly adapting to the State's ever-changing tax laws and regulations. The Integrated Tax System project will replace the existing legacy tax systems that were designed over 40 years ago and are rooted in old technology with a modernized system designed to use newer, less costly technology.

The project will consist of acquiring and implementing a packaged tax administration system. Major activities will include configuring the system to meet the specific North Dakota requirements, converting data from the existing legacy systems, testing the functionality of the system and the accuracy of the converted data, and training system users and operators.

The objectives of the project include:

- ▶ Migration of Sales, Withholding, Corporate, and Individual Income taxes (including small business, partnership, and fiduciary returns) to the new system.
- ► Implementation of fully integrated tax administration for these taxes, including the following functions:
  - ♦ Administration of taxpayer information
  - ♦ Returns issuance and processing
  - ♦ Interfaces with front-end processing (OCR) and data entry systems
  - ♦ Interfaces with e-filing programs
  - ♦ Payments processing
  - ♦ Refunds processing
  - ♦ Transaction management and taxpayer accounting
  - ♦ Revenue accounting
  - ♦ Compliance functions, including workflow management for:
    - Non-filer
    - Collections
    - Audit
  - ♦ Records management



- ♦ Image management
- ♦ Letters issuance
- ♦ Report generation
- ♦ Ad hoc data inquiry and analysis
- ▶ Migration of accounts receivable to the new system.
- ▶ Migration of revenue accounting to the new system.
- ▶ Elimination of the use of the mainframe by the Tax Department.

Taxpayers are increasing their demands for more functionality over the Internet while demanding that the information be safe and secure. Additionally, taxpayers - individuals and business owners alike - are demanding streamlined methods of dealing with the Tax Department in order to improve their own efficiencies.

On the State side of the equation, the Tax Department needs to continue to enhance its ability to improve compliance and collections, and refine audit and fraud detection processes. An integrated tax system will offer solutions to both taxpayers and state government by providing streamlined centralized service to the taxpayer while improving the Department's internal processes.

Upon completion of the two-year implementation project, there will still be a number of smaller tax types that will not have been migrated to the integrated tax system. In order to achieve the full benefits of the new system, the Tax Department will develop plans to migrate these tax types over time. The current intent is to utilize internal resources that will have gained knowledge and experience in configuring the system during the main project to handle the further migrations.

## **Business Need/Problem**

The Tax Department collects the bulk (approximately 85%) of all general fund dollars for the State. This is currently being done using a conglomeration of software systems. The current tax systems were originally developed in 1960 and converted (not redeveloped) to a different file system in the mid-eighties. Although they have been generally stable and reliable, they are not cost effective to operate or maintain. Even minor changes can require costly programming and can take a significant amount of time. The application development cycle is lengthy and often "out of step" with the business process it intends to serve. A rapidly dwindling pool of people with the skills to maintain these old technologies compounds the problem.

The more important of these systems also reside on the mainframe. Because the mainframe also represents an aging and expensive technology, the State's Information Technology Department is pursuing an initiative to migrate all applications off of the mainframe to more modern platforms. However, it is important to point out that simply migrating the aging tax software off of the mainframe and on to new hardware does not change its underlying technology, nor does it create any improvements in its capability or useful life. It only constitutes a costly and time-consuming detour from the necessary replacement.

The "silo" design of the tax systems (separate systems for each tax type) prevents meaningful collection, compliance, and discovery functions as much of the cross-check and discovery work is



manual. The use of these outdated legacy applications hampers the Tax Department in its efforts to improve customer service and increase revenue with enhanced compliance, audit, discovery, and collections tools.

Because these systems are limited by their age and effectiveness, the various sections of the Tax Department have resorted to using other tools such as Microsoft Access and Excel to process and maintain significant elements of tax administration data. There are currently almost 1,300 Access databases and 11,000 Excel spreadsheets employed by the Tax Department. Many of these contain data that would better serve the agency if it were maintained in a central system. While these tools are valuable to support specialized functions, they do not provide the level of security and data integrity needed in enterprise systems.

In addition, the Tax Department continues to receive numerous requests to provide analytical information, such as evaluating impacts on projected state revenue that might occur as the result of various proposed changes to tax rates, laws, and/or rules. Responding to these "ad hoc" requests in a timely manner using the current computer system is very time-consuming and resource intensive.

With such an old system, the Tax Department has reached a point of diminishing returns in its ability to gain further savings from technology. More importantly, there is a significant risk of a major system failure and the interruption of critical government services, which could also lead to potential losses of revenue.

#### **Additional Issues**

### **▶** Business Issues

- ♦ As indicated above, the current tax systems were constructed as silos of information pertinent to only that tax type. This makes sharing data with other tax systems difficult, requiring custom interfaces. Tax Department efficiencies are hampered and revenue dollars due the State may remain uncollected since taxpayer and tax data cannot be automatically compared across the different tax types.
- ♦ By establishing a single Taxpayer Account across multiple tax types, the option of having a single view on the taxpayer's history in the collection process will enable increased voluntary compliance, reduce taxpayer burden, and improve performance in customer service.
- ♦ Tax systems that are designed as silos tend to enable the creation of business processes and rules that are also "siloed". Processes that could be the same across the organization are not because they were developed by tax type rather than function. An Integrated Tax System would lend itself toward unified business rules and processes, thereby improving operational efficiencies and reducing the cost to collect revenue.
- ♦ In 1985, a group of legislators and legislative staff representing several states convened and created a report Principles of a High-Quality State Revenue System. An integrated tax system addresses the following principles as defined in this report:
  - A high-quality revenue system facilitates taxpayer compliance. It is easy to understand and minimizes compliance costs.



A high-quality revenue system promotes fair, efficient, and effective administration.
 It is as simple as possible to administer, raises revenue efficiently, is administered professionally, and is applied uniformly.

## **▶** Technology Issues

The Enterprise Architecture ITD Systems Architect has presented a Servers and Operating Systems Future State to the State Information Technology Advisory Committee and the Interim IT Committee. In the report, there are compelling arguments for migrating away from the mainframe platform:

- ♦ The current server and operating system infrastructure presents the State with challenges that must be addressed:
  - Every major operating system currently available is part of the State infrastructure and supporting a wide variety of platforms requires a wide variety of skill sets and so implies a larger staff.
  - The operation and maintenance of these systems requires staff with mainframe skill sets.
  - As of 2002 some 60% of the people with these legacy skill sets were age 50 or older.
  - People entering the IT field are not trained in these legacy skill sets.
  - The server hardware is becoming a commodity item dominated by Intel compatible machines.
  - The commoditization of server hardware is driving the operating system market towards Microsoft Windows and Linux.
  - Business applications will need to be developed in a flexible manner, i.e.; the
    application must be hardware and operating software platform neutral so that its
    operation is platform independent.
- ♦ Continued support of these business critical legacy systems will require one of three approaches:
  - Migrate these legacy systems to some other platform,
  - Provide in house training to assure the availability of trained staff, or
  - Outsource the support and maintenance of these systems.
- ♦ State Government will be presented with three alternatives for systems that address core business needs such as the tax administration system:
  - Deploy custom built software tailored to the specific business needs.
  - Deploy Commercial-Off-The-Shelf (COTS) software and modify business processes to meet the software.
  - Deploy COTS software that is customized to meet specific business needs.

## **Solution**

The Tax Department plans to acquire and implement a commercial off-the-shelf (COTS) integrated tax system. With a COTS package, the basic architecture and programming is already complete. Since tax processing and administration is generally similar across jurisdictions, certain software companies have been able to develop packages that have much of the required functionality already inherent in the system. This will allow the main emphasis of the project to be configuring the system with the specific business rules applicable to North Dakota.



With a COTS approach, the project will be able to deploy the system rapidly and get something in front of the users quickly. The Tax Department will be able to make changes on the fly since the business rules are maintained in reference tables, not embedded in "hard" code. It will also allow the project to focus testing on business rules rather than on infrastructure.

Using a COTS package the majority of functions are available through configuration, rather than coding. With this in mind, the Tax Department will take the approach of molding its business processes to the manner in which the COTS system is designed, rather than trying to customize the system. Business processes will be analyzed and adjusted to optimize the power of the new system. This will provide added opportunities for the Tax Department to increase operating efficiencies. It will also ensure that upgrades to the product can be more easily incorporated and that overall maintenance costs will be minimized.

Compared to designing and programming a customized system from scratch, implementing a COTS package will:

- ► Reduce risk
- ► Reduce overall cost implementation and maintenance
- ► Shorten the implementation schedule
- ► Enable North Dakota to take advantage of system upgrades that are being regularly made to the core product
- ► Enable North Dakota to quickly adapt to tomorrow's business challenges

As part of the planning phase of the project, the Tax Department will finalize requirements and prepare a Request for Proposal. The Department has already identified those vendors that are offering COTS integrated tax systems. The intent of the selection process will be to acquire a package that provides solid functionality in a cost effective manner. The Tax Department will also be looking for a vendor that understands tax processing and whose system has been employed in more than one other revenue agency.

The final integrated product will be designed for the business of government and will be rich with features and functions based on revenue solution experts' knowledge and prior work. The solution will provide:

- ► Tax Revenue and Return Processing supporting taxpayer identification, registration, and return filing through multiple channels (web, phone, etc).
- ► Collection processing that includes taxpayer history and multiple payment methods as well as risk management that models taxpayer behavior based on past history. This functionality supports the collectors' activities by focusing on the cases with the highest likelihood of collection. Risk Management tools allow collection staff to apply the three R's of tax administration getting the right account to the right resource at the right time.
- ▶ Audit and discovery support that enables comprehensive audit management tools and other case prioritization tools. The audit function will provide a warehouse of data for known and potential taxpayers that will allow auditors to select cases that optimize the potential for generating revenue. The discovery function will enable the audit groups to identify potential



- taxpayers who were previously unknown. This approach will also minimize intrusion on taxpayers who are most likely to be compliant.
- ► Fraud detection tools that will quickly identify and flag suspect tax returns to avoid loss of revenue. Recovering refunds that have been incorrectly distributed based on fraudulent returns is often impossible. The fraud detection tool will compare returns to external patterns that match potential known fraudulent activity, allowing the Tax Department to remove high-risk refunds from the normal tax processing cycle.

## **Consistency/Fit with Organization's Mission**

The mission of the Office of the State Tax Commissioner is to fairly and effectively administer all taxes as defined in N.D.C.C. § 57 to meet the resource needs for the State of North Dakota. An integrated tax system will allow the agency to achieve that mission without the risk of disruption posed by the aging legacy systems.

The new system would also help the Tax Department meet the goals that are aligned with its Mission, Vision, and Guiding Principles:

- ► Excellent customer service
  - ♦ Compliance is less burdensome for taxpayers
  - ♦ Single taxpayer accounts provide for one-stop-shopping
  - ♦ Providing accurate, reliable data quickly as required by the taxpayer
- ▶ Wise and prudent use of all resources through effective and efficient operations
  - ♦ Improved internal business processes (do more with less)
  - ♦ Reduced IT operational costs
- ► Increased Revenues
  - ♦ Voluntary compliance
  - ♦ Audit tools
  - ♦ Improved collection tools
  - ♦ Greater fraud detection

The Tax Department has continued to find new and improved ways of employing technology to benefit the State and its citizens. However, as the old system becomes more cumbersome to maintain, the Department is losing its ability to make further gains in efficiencies. A new integrated tax system would provide the agency with a state-of-the-art platform and open additional opportunities to leverage technology in the future.

This project also aligns with ITD's Enterprise Architecture (EA) domain team's future state. ITD will be involved in every aspect and their Chief Architect has completed some preliminary research for the Tax Department. This project relates to an analysis regarding the mainframe replacement (Platforms and Operating Systems Study) currently underway with ITD and EA. There is potential for partnering with other agencies on this project.



## **Cost Benefit Analysis**

## **Anticipated Benefits:**

The benefits realized from a project of this nature fall into four major categories:

- ▶ Better customer service.
- ► Increased employee productivity.
- ► Cost savings due to easier software changes and maintenance, and more cost effective hardware environments (client server vs. mainframe).
- ▶ Additional revenues generated from more effective processing and compliance activities.

An integrated tax system will provide faster access to taxpayer information. It will allow for consolidated taxpayer accounts and will help provide a "one-stop-shopping" experience for the taxpayer. Customer service is enhanced with the ability to solve issues quickly the first time. This will also lead to fewer complaints and a higher level of voluntary compliance.

Also, from a customer service perspective, the new system will provide a sound technological underpinning for continuing to increase the types of service that can be provided online. The system will give the Tax Department the foundation to achieve its mission of fairly and effectively administering the tax laws of the State of North Dakota.

In the area of productivity, the system will provide a unified solution that presents users a single consistent view of taxpayer information across all tax types and across all business functions. It will give users automated tools that enhance collections management, audit selection and timeliness, and discovery of non-filers. It will incorporate workflow management tools that help employees and managers better prioritize their activities. The capabilities of the system and the process of implementing it will provide opportunities to revise business processes and eliminate organizational silos.

It will also ensure more reliable data with better analytical capabilities. This will in turn allow for better modeling and faster implementation of tax law changes.

Ongoing cost savings will occur in two areas. Moving the primary tax system from a mainframe-based technology to the new system operating in a client-server environment will generate a net savings of approximately \$250,000 per year. Reductions in the cost of software programming changes and maintenance will be about \$270,000 per year. These two elements of savings will be partially offset by an estimated cost of \$300,000 per year for an upgrade and maintenance contract with the COTS software vendor. This results in an overall savings of \$220,000 per year or \$440,000 per biennium.

Potential revenue increases are more difficult to estimate. There are many variables that affect annual revenues for the State, and isolating those to specific improvements generated by a new tax system is problematic. Several states that have implemented new systems with enhanced capabilities have attempted to capture this information and segregate it into separate components such as increased collections, improved audit response, reduced non-filers, etc.



Some of the results have been fairly astounding. In Idaho, the Tax Commission attributed \$15.2 million in increased revenues to better tools provided by the new system in its first year of operation alone. Totals for three years now exceed \$60 million. In New Mexico, they experienced an initial revenue lift of several million dollars. However, in both cases the increases were generated by activating processes in conjunction with implementing a new system that their old systems could no longer support.

In most cases the North Dakota Tax Department is currently handling the necessary business processes. However, to do so requires extensive manual effort and the use of less effective tools. It may be more important to consider the benefit as stopping the loss of revenue because of inadequacies in the old technology, rather than generating new revenues. This loss of revenue is something that could occur in North Dakota if current systems are not replaced in the near future.

An attempt has been made to identify those areas within the Tax Department where the added capabilities of the new system could potentially yield additional revenues. The most likely areas are related to increased discovery of non-resident taxpayers through enhanced records matching, better tools for prioritizing collections and audit activities, and a general increase in the number of audits due to better access to data and more effective workflow management tools.

Estimates of the potential increases by section are shown in the following table. It must be noted that this represents a best effort evaluation, but that actual results cannot be easily measured or guaranteed.

Major Tax Types	Revenue FY2004	% Revenue Increase	Potential Revenue Increase		Basis	Annual Total		% Increase	Reasons
Sales Tax	\$373,537,967	0.11%	\$	400,000	Audit	\$	4,000,000	10.0%	Better discovery and prioritization tools
		0.09%	\$	350,000	Compliance	\$	350,000,000	0.1%	Better identification of nexus
Individual Income Tax	\$84,977,557	0.59%	\$	500,000	Audit	\$	2,500,000	20.0%	Better non-resident identification and more timely audits
Withholding Tax	\$160,860,604	0.09%	\$	150,000	Audit	\$	150,000,000	0.1%	More formalized audit program
		0.09%	\$	150,000	Compliance	\$	150,000,000	0.1%	Better non-resident identification
Corporate Income Tax	\$57,657,511	1.04%	\$	600,000	Audit	\$	6,000,000	10.0%	Better identification of nexus and increased # of small audits
Accounts Receivable	\$27,108,124	1.29%	\$	350,000	Contact Collections	\$	7,000,000	5.0%	Better workflow tools increase efficiency in collection process
TOTAL	\$704,141,762	0.36%	\$	2,500,000					



## **Cost Estimate:**

The costs for a project of this nature fall into four major categories:

Software – the largest element of software is the license for the COTS integrated system. This will be procured using an RFP process. The estimate for these costs is based on the experience of other states that have completed similar projects. Also included in the software category are the licenses for the underlying relational database, the operating systems for the various servers, and any tools to be used to support the programming, configuration, migration, and documentation of the tax system.

Hardware – this consists primarily of the servers that will be used to run the COTS application and the related databases. The costs include provision for sufficient hardware to maintain the production environment along with the capacity to provide mirrored back-up and continued development and testing. The project budget has been built on the assumption that the Tax Department would purchase the hardware as part of the project, and then have ITD provide operations and maintenance services. The alternative of having ITD acquire the hardware and then charge back the Tax Department at an increased hosting cost will also be evaluated.

Services – this consists of the services acquired from outside vendors to support the implementation of the COTS package and the management of the project. It also includes the incremental cost (any overtime) for Tax Department personnel assigned to the project, and the cost of services provided by ITD to assist with implementation and conversion, and to host the hardware and software.

Project Operating Expenses – this consists of general overhead expenses for maintaining a project office during the implementation effort including space, equipment, and network connectivity.

Contingency – with a project of this nature, there is a level of uncertainty at this early planning stage related to some cost elements. This necessitates the inclusion of a contingency amount in the budget to cover unforeseen circumstances. As an example, the costs of the COTS software license and related implementation services represent the major portion of the budget. Since the bidding process has not yet occurred, there is a possibility that the prices in the winning proposal will be different than the estimated costs used in the budget.

The budget for the project is summarized as follows:

Description	Object Code		Cost Estimate		
Software					
COTS Integrated Tax System	3005	\$	2,500,000		
Database and Other Support Software	3005	\$	123,000		
Hardware					
Servers	Capital Asset (TI5016)	\$	99,000		
Services					
Staff Overtime	1001	\$	195,840		
Temporary Labor	1001	\$	72,000		
Implementation Services	3008	\$	7,488,000		
Project Management	3008	\$	654,720		
ITD Services	3002	\$	1,420,673		
Project Operating Expenses		\$	164,100		
Contingency		\$	953,800		
TOTAL		\$	13,671,133		



A detailed budget for the project has been prepared and is included as Attachment 1.

The Tax Department is almost exclusively funded using general fund dollars. As such, there is no anticipation of any federal or other special funding for this project. There is also no mechanism for charging out the services to customers.

The Tax Department does recognize that there may be various methods to finance the project other than a direct general fund appropriation in the upcoming biennium. The Department has reviewed certain possibilities with the Industrial Commission and the Bank of North Dakota. These include issuing bonds through the North Dakota Building Authority or obtaining a direct loan. The report from the Industrial Commission providing details for these options is included as Attachment 2.

In any case, the intent is to better match the outflow of cost to the timing of the benefits. The Tax Department is seeking guidance from the Legislature on the most effective means for funding the project.

## **Cost/Benefit Analysis:**

The following table summarizes the potential cost savings and revenue increases, and compares them to the overall project budget to calculate a payback period for the project.

	Annual Impact
Mainframe operating cost decrease	(\$249,265)
Programming cost decrease	(\$258,111)
Eliminate use of Great Plains for revenue accounting	(\$12,790)
Software License Renewal Fees	\$300,000
Total Annual Cost I	mpact (\$220,166)
Potential Revenue	Lift \$2,500,000
Net Impact	\$2,720,166
Project Cost	\$13,671,133
Years for Payback	5.0



## **Project Risks**

The single biggest risk for North Dakota and the Tax Department is to not proceed with the project. Without a new system, the Tax Department runs the risk of a major failure in its existing systems that could lead to a significant disruption in its business, with a potential loss of revenue for the State. As noted above, New Mexico had to cease sending individual income tax assessments for an extended period because their old system could no longer handle the processing. This resulted in a significant slowdown and loss of revenue.

Beyond that, there are other risks associated with not replacing the system. Some of these include:

- ► Slowdown in the ability to complete audits resulting in the expiration of the statute of limitations.
- ▶ Reduced ability to respond in a timely manner to tax law changes.
- ▶ Potential loss of data integrity since the same data elements need to be entered across multiple systems.
- ► Inability to meet taxpayer expectations regarding the expanded use of technology to provide customer service.

The implementation of an integrated tax system faces a variety of risks. These risks can generally be divided between technology risks and project risks. Examples include:

## **Technology Risks**

- System capability
- ► Functionality gaps
- ► Technical infrastructure
- ► System architecture
- System maintenance and supportability
- ► Expandability

## **Project Risks**

- ► Cost
- ► Schedule
- ► Unclear requirements and scope creep
- ► Excessive customization
- ► Converted data problems
- ► Availability of resources
- ► Skills gaps

Each of these areas requires ongoing monitoring and a plan for mitigating the risk. In the case of technology, the risk will be minimized by selecting a commercially available packaged tax system that has been proven to work in other revenue agencies. The selected system should be developed using up-to-date programming tools that support an open architecture and work with any SQL-compliant database. It should also be designed to operate in an n-tier client-server environment to provide maximum flexibility and cost effectiveness in hardware selection.

To effectively manage project risk, the Tax Department will take several key steps. First, the Department has contracted with a professional project management firm (AdvanTech, LLC) to



provide planning and oversight services. AdvanTech has particular strength in the revenue and taxation arena, having provided a variety of services related to the management, planning, and implementation of COTS-based integrated tax systems for the Idaho State Tax Commission, Louisiana Department of Revenue, and Montana Department of Revenue.

Second, the selection process used to acquire the COTS product will also require the software vendor to provide implementation support services with personnel that understand both the system and the business of tax administration.

Finally, the project will utilize implementation methodologies that have been proven on similar projects. These will incorporate the areas of system configuration and development, testing, data conversion, user training, technical knowledge transfer, and business process and organizational change management. The project will also employ widely accepted tools and processes for monitoring and controlling the project's scope, schedule, cost, and quality.

